

others are now being assembled for publication in the proceedings of the assembly.

The Pan American Institute of Geography and History is the outgrowth of a suggestion made in 1928 at a conference held in Havana when ways and means for promoting intellectual cooperation among the people in the western world were under consideration. Later it was decided that the headquarters and permanent home of this institute should be in Mexico City. The Mexican government has provided an excellent building where offices, drafting rooms, library and private studies are available. During the years that have passed since its organization, the institute has conducted many important investigations. New maps have been published and a number of scientific monographs have been issued. Other maps are now under construction and archeological investigations are in progress. Through the generosity of the Mexican government and the cooperation of a number of the American republics, headquarters have now been established where scholars interested in geographical or historical research in the Americas will be given every possible assistance.

The Pan American Institute of Geography and History differs from most international organizations in that it is established for the active promotion of and participation in research.

Arrangements for the recent assembly held in Washington were made by an organizing committee, appointed by the State Department: Dr. Wallace W.

Atwood, *chairman*; Col. Claude H. Birdseye; Major William Bowie; Dr. A. V. Kidder; Dr. Waldo S. Leland; Mr. Hunter Miller; Mr. Richard Southgate. The President of the United States has furthermore appointed a National Committee to cooperate with the Pan American Institute of Geography and History. That committee is organized as follows: Dr. Wallace W. Atwood, *chairman*; Colonel Claude H. Birdseye, *vice-chairman for geography*; Dr. Clarence H. Haring, *vice-chairman for history*; Dr. A. S. Aiton; Dr. Harlan H. Barrows; Dr. S. W. Boggs; Dr. Herbert E. Bolton; Major William Bowie; Dr. Charles F. Brooks; Colonel Frederic A. Delano; Dr. Nevin M. Fenneman; Dr. Gilbert H. Grosvenor; Dr. C. W. Hackett; Dr. Ellsworth Huntington; Dr. Douglas Johnson; Dr. A. V. Kidder; Dr. Waldo S. Leland; Dr. Irving A. Leonard; Colonel Lawrence Martin; Dr. John C. Merriam; Mr. Hunter Miller; Dr. Parker T. Moon; Dr. Dana G. Munro; Dr. Robert C. Murphy; Dr. Lowell J. Ragatz; Dr. J. Fred Rippey; Dr. James A. Robertson; Dr. W. S. Robertson; Dr. Carl O. Sauer; Dr. France V. Scholes; Dr. Alfred M. Tozzer; Dr. Frank E. Williams.

Dr. Pedro C. Sanchez, the director, and Mr. Octavio Bustamante, the assistant director, continue to have immediate charge of the activities of the institute. Their offices are at the headquarters of the institute in Mexico City.

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REPORTS

PROPOSAL OF A PUBLIC MUSEUM OF SCIENCE ERECTED IN ST. LOUIS AS A MONUMENT TO THOMAS JEFFERSON¹

In 1903 preparations were being completed for a great exposition to be held in St. Louis in celebration of the one hundredth anniversary of the Louisiana Purchase and in honor of the memory of Thomas Jefferson. The "World's Fair" presented in wonderful exhibits the progress of nations in agriculture, industry, science and art. It was an educational institution on an immense scale, teaching by the practical objective method the throngs of people who attended. The exposition was maintained for eighteen months, then its costly collections were removed, the buildings, many of them beautiful examples of the architect's genius, were torn down and the World's Fair, which enlightened and inspired its visitors, became for them a fascinating memory to recall and to recount to another generation.

¹ Adopted by the council of the Academy of Science of St. Louis, October 3, 1935.

And now, in the present year, another opportunity presents itself to commemorate the author of the Louisiana Purchase, by the recommendation of the Federal Government and the promise of a generous sum of money to erect a permanent monument to Thomas Jefferson in St. Louis. On September 10, 1935, the city took its first step toward the realization of the idea, by voting a bond issue of \$7,500,000 for the purchase of the site on the Mississippi water front, as stipulated in the government's plan.

The government's recommendation does not name or suggest the kind of monument to be erected, and that important item is left to be determined by the presentation of ideas to be carried into plans for construction. In the conviction that the erection of a permanent monument is a settled thing, and imbued with the feeling that a public science museum would be an appropriate memorial, deserving of consideration, the following argument is submitted in its favor.

As far as possible the monument should reflect Jefferson's character and interests and indicate some of his achievements. As to the last, the building of the

memorial in St. Louis would in itself symbolize Jefferson's statesmanship in the conception and consummation of the Louisiana Purchase, the Lewis and Clark Expedition, Pike's explorations of the Mississippi and the Southwest and the settling of the valley and the west following the war of 1812.

Jefferson, it will be remembered, was one of the early Americans distinguished for interest in science. The pursuit of natural science and the application of scientific discovery to man's use and benefit interested him throughout his long life. He has been regarded as the founder of American paleontology. He is said to have dropped the practice of law because in his day it was unscientific. In all his work he invoked the scientific method, and his success in statesmanship can be attributed in no small measure to his habit of scientific reasoning and scientific treatment of political questions.

He was deeply interested in education. As the "Father of the University of Virginia" Jefferson formulated its organization, planned the layout of the grounds, selected its first faculty and subscribed generously to its financial support. His interest in education appears in his establishing the first public school system in Virginia, the Congressional bill for the diffusion of knowledge, his unsuccessful attempt to have Congress create a national university.

Architecture and landscape architecture occupied much of Jefferson's time and thought; the capitol in Richmond, homes of Madison and Monroe, the quadrangle of the University of Virginia, Monticello and its grounds, are among a rather long list of notable public and private edifices and gardens originally planned by or the results of Jefferson's expert architectural knowledge and advice. Jefferson was a lover of the beautiful in nature and in man's works, and, devoted to its cultivation in the nation, he labored by example to inculcate his belief in the effort to improve the standard of architecture both in cities and in rural surroundings.

One learns from his biographers that he was an accomplished musician; but his relation to music is much broader and deeper than is expressed by his performance on a single instrument. His music, his delvings in language and writings on ethics were not merely

brilliant flashes of a versatile personality, but outward signs and expressions of a rare studious, scholarly and philosophic mind. Jefferson's idealism did not make him the less practical, for he was always striving to invent useful things, to introduce plants beneficial to American farmers, to improve and simplify by eminently practical suggestions the reform of needlessly cumbersome procedures and systems.

No monument to Thomas Jefferson would satisfy that did not in some way impress the visitor with the feeling of freedom. Take away from the man all his traits and attributes but the hunger for freedom for his fellow men and most of Jefferson's character would remain. Inspired by reflections over the emancipation of men from bonds and tyranny of every sort he wrote the Declaration of Independence. A monument to Jefferson should create about it the atmosphere of freedom.

As already stated, the location of the monument would symbolize the Louisiana Purchase, the greatest achievement of its kind in the history of the United States and second only to the Declaration among the acts of Jefferson's statesmanship. A monument consisting of an architecturally superb building in spacious grounds, embellished with the best attainable landscaping effects, would conform to two of Jefferson's deepest interests. A building containing and exhibiting grand collections of natural objects and man's inventions, presenting the methods and results of scientific investigation and their application in agriculture, industry and the arts, to comprise a museum of science for the purpose of diffusing knowledge; asking no entrance requirements, demanding no tuition or laboratory fees, open and free for the youth and the man of the street to enter and acquire useful knowledge to the making of better citizens. A building hospitably planned to foster the scientific movement and the spreading of knowledge; to carry on perpetually the method of objective instruction that demonstrated its appeal to the popular mind by the myriad visitors to the Louisiana Purchase Exposition. A towering monument, symbolizing the spirit of Jefferson and the American ideal of democracy, arresting the eye of visitors from afar, a sign of the forward look of the people of St. Louis.

SPECIAL ARTICLES

THE CORRELATION OF DEEP-FOCUS EARTHQUAKES WITH LUNAR HOUR ANGLE AND DECLINATION

CERTAIN small variations in latitude previously announced¹ and corresponding small changes in longitude

show an apparent correlation with the hour angle and declination of the moon.² The possibility of such small changes in geographical coordinates being asso-

¹ SCIENCE, 69: 17, 1929.

² Monthly Notices Royal Astronomical Society, 91: 569, 1931, and March, 1935.